

This listing of claims will replace all prior versions and listings of claims in the instant application:

CLAIMS

1. (Currently Amended) A method for operating a speech recognition system, in which a program-controlled recognizer [[(1)]] performs the steps of:
dissecting a speech signal into frames and computing any kind of feature vector for each frame [[,]];
labeling frames by characters or groups of them yielding a plurality of labels per phoneme [[,]]; and
decoding said labels according a predetermined acoustic model to construct one or more words or fragments of a word, ~~in which method~~
wherein a plurality of recognizers are accessible to be activated for speech recognition, and are combined in order to balance the results of speech recognition done by a single recognizer, ~~characterized by the steps of~~ the method further comprising:
 - a) collecting (~~210, 220, 230, 240~~) selection base data characterizing speech recognition boundary conditions with sensor means [[(5)]];
 - b) using [[(260)]] program-controlled arbiter means [[(6)]] for evaluating the collected data; and
 - c) selecting [[(290)]] the best suited recognizer or a combination thereof out of the plurality of available recognizers according to said evaluation.
2. (Currently Amended) The method according to claim 1, in which said sensor means [[(5)]] is one or more of:

a decision logic, including software program, physical sensors or a combination ~~of them~~ thereof.

3. (Currently Amended) The method according to claim 1, further comprising the steps of:

a) processing [[(260)]] a physical sensor [[(5)]] output in a decision logic implementing one or more of [[:]] statistical tests, decision trees, and fuzzy membership functions [[,]] ; and

b) returning [[(270)]] from said process a confidence value to be used in the sensor select/ combine decision.

4. (Currently Amended) The method according to claim 1, in which selection base data which have led to a recognizer select decision, is stored in a database for a repeated fast access [[(250)]] thereof in order to obtain a fast selection of recognizers.

5. (Currently Amended) The method according to claim 1, further comprising the step of:

selecting [[(290)]] the number and/or combination of recognizers dependent [[(280)]] of the current processor load.

6. (Currently Amended) The method according to claim 1, further comprising the step of:

storing the mapping rule [[(7)]] how one acoustic model is transformed to another one, instead of storing a plurality of models themselves.

7. (Currently Amended) A computer system ~~having means for performing the steps of a method according to one of the preceding claims 1 to 6.~~
comprising:

means for dissecting a speech signal into frames and computing any kind of feature vector for each frame;

means for labeling frames by characters or groups of them yielding a plurality of labels per phoneme;

means for decoding said labels according a predetermined acoustic model to construct one or more words or fragments of a word,

wherein a plurality of recognizers are accessible to be activated for speech recognition, and are combined in order to balance the results of speech recognition done by a single recognizer, the computer system carrying out the method of:

a) collecting selection base data characterizing speech recognition boundary conditions with sensor means;

b) using program-controlled arbiter means for evaluating the collected data;
and

c) selecting the best suited recognizer or a combination thereof out of the plurality of available recognizers according to said evaluation.

8. (New) The system according to claim 7, in which said sensor means is one or more of:

a decision logic, a software program, physical sensors or a combination thereof.

[[8.]] 9. (Currently Amended) A computer program for execution in a data processing system comprising computer program code portions for

performing respective steps of the method according to anyone of the preceding claims 1 to 6, :

dissecting a speech signal into frames and computing any kind of feature vector for each frame;

labeling frames by characters or groups of them yielding a plurality of labels per phoneme; and

decoding said labels according a predetermined acoustic model to construct one or more words or fragments of a word,

wherein a plurality of recognizers are accessible to be activated for speech recognition, and are combined in order to balance the results of speech recognition done by a single recognizer, the method further comprising:

a) collecting selection base data characterizing speech recognition boundary conditions with sensor means;

b) using program-controlled arbiter means for evaluating the collected data;
and

c) selecting the best suited recognizer or a combination thereof out of the plurality of available recognizers according to said evaluation,

when said computer program code portions are executed on a computer.

10. (New) The computer program according to claim 9, in which said sensor means is one or more of:

a decision logic, a software program, physical sensors or a combination thereof.

[[9.]] 11. (Currently Amended) A computer program product stored on a computer usable medium comprising computer readable program means for causing a computer to perform the ~~method of anyone of the claims 1 to 6~~, steps of:
dissecting a speech signal into frames and computing any kind of feature vector for each frame;

labeling frames by characters or groups of them yielding a plurality of labels per phoneme; and

decoding said labels according a predetermined acoustic model to construct one or more words or fragments of a word,

wherein a plurality of recognizers are accessible to be activated for speech recognition, and are combined in order to balance the results of speech recognition done by a single recognizer, the method further comprising:

a) collecting selection base data characterizing speech recognition boundary conditions with sensor means;

b) using program-controlled arbiter means for evaluating the collected data;
and

c) selecting the best suited recognizer or a combination thereof out of the plurality of available recognizers according to said evaluation,

when said computer program product is executed on a computer.

12. (New) The computer program product according to claim 11, in which said sensor means is one or more of:

a decision logic, a software program, physical sensors or a combination thereof.